

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 76060 Date: 8-27-2003
 Art Unit: 1752 Phone Number 305-0504 Serial Number: 10/026,120
 Mail Box and Bldg/Room Location: 9B/5 Results Format Preferred (circle): PAPER DISK E-MAIL

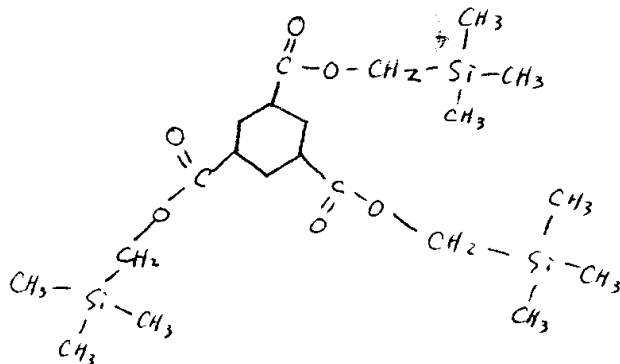
If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Positive resist compositions containing non-polymeric
 Inventors (please provide full names): Li, Wenjie; Varanasi, PushKara silicon
Rao; Kwong, Rane additives
 Earliest Priority Filing Date: 12-21-2001

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Photoresist or resist composition comprising
 the following compound



STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: EL NA Sequence (#) _____ STN \$117.43
 Searcher Phone #: _____ AA Sequence (#) _____ Dialog _____
 Searcher Location: _____ Structure (#) (1) Questel/Orbit _____
 Date Searcher Picked Up: _____ Bibliographic _____ Dr. Link _____
 Date Completed: 8-28-03 Litigation _____ Lexis/Nexis _____
 Searcher Prep & Review Time 5 Fulltext _____ Sequence Systems _____
 Clerical Prep Time: _____ Patent Family _____ WWW/Internet _____
 Online Time: 25 Other _____ Other (specify) _____

=> file reg

FILE 'REGISTRY' ENTERED AT 13:56:22 ON 28 AUG 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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=> d his

FILE 'REGISTRY' ENTERED AT 13:05:41 ON 28 AUG 2003
E C18H38O4SI2/MF

L1 72 S E3
L2 16 S L1 AND TRIMETHYL?

FILE 'HCAPLUS' ENTERED AT 13:12:05 ON 28 AUG 2003

L3 207761 S LI ?/AU
L4 0 S VARANAI ?/AU
L5 48841 S RAO ?/AU
L6 1554 S KWONG ?/AU
L7 402 S VARANASI ?/AU
L8 0 S L3 AND L5 AND L6 AND L7
L9 4 S L3 AND L7 AND L6
SEL L9 1-4 RN

FILE 'REGISTRY' ENTERED AT 13:14:21 ON 28 AUG 2003

L10 7 S E1-E7
E C21H42O6SI3/MF
L11 2 S E3
L12 1 S L10 AND L11

FILE 'ZCAPLUS' ENTERED AT 13:19:50 ON 28 AUG 2003

L13 1 S L12

FILE 'CAOLD' ENTERED AT 13:20:54 ON 28 AUG 2003

L14 0 S L13

FILE 'REGISTRY' ENTERED AT 13:21:02 ON 28 AUG 2003

E METHANOL, (TRIMETHYLSILYL) -/CN
L15 1 S E3

FILE 'LREGISTRY' ENTERED AT 13:24:29 ON 28 AUG 2003

E C10H18O4/MF
L16 24 S E3
L17 0 S L16 AND DIACID#
L18 11 S L16 AND NO RSD/FA

FILE 'REGISTRY' ENTERED AT 13:31:05 ON 28 AUG 2003

L19 986 S L18
L20 0 S L19 AND DIACID?
L21 818 S L19 AND ACID#/CNS

FILE 'LREGISTRY' ENTERED AT 13:36:50 ON 28 AUG 2003

L22 STR

FILE 'REGISTRY' ENTERED AT 13:50:58 ON 28 AUG 2003

L23 0 S L22

L24 0 S L22 FUL

FILE 'REGISTRY' ENTERED AT 13:56:22 ON 28 AUG 2003

=> file zcaplus

FILE 'ZCAPLUS' ENTERED AT 13:56:53 ON 28 AUG 2003

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=> d l13 1 ibib abs hitstr hitrn

L13 ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:511922 ZCAPLUS

DOCUMENT NUMBER: 139:92747

TITLE: Positive resist compositions containing
non-polymeric silicon additives

INVENTOR(S): Li, Wenjie; Varanasi, Pushkara Rao; Kwong, Ranee

PATENT ASSIGNEE(S): International Business Machines Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003124453	A1	20030703	US 2001- <u>26120</u>	20011221
PRIORITY APPLN. INFO.:			US 2001-26120	20011221

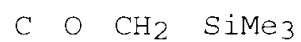
AB Acid-catalyzed pos. resist compns. suitable for bilayer or multilayer lithog. applications are enabled by the use of a combination of (a) an acid-sensitive imaging polymer, (b) a radiation-sensitive acid generator, and (c) a non-polymeric silicon additive. The imaging polymer is preferably imageable with 193 nm or shorter wavelength imaging radiation. The resist compns. preferably contain at least about 5 wt. % silicon based on the wt. of the imaging polymer. The compns. generally provide reduced line edge roughness compared to conventional silicon-contg. resists.

IT 552838-63-8P

(prepn. of non-polymeric silicon additive for pos. resist compns.)

RN 552838-63-8 ZCAPLUS

CN 1,3,5-Cyclohexanetricarboxylic acid, tris[(trimethylsilyl)methyl] ester (9CI) (CA INDEX NAME)



IT 552838-63-8P

(prepn. of non-polymeric silicon additive for pos. resist
compns.)